

CLAIMS

What is claimed is:

1. A computer-readable medium comprising software for a video surveillance system, comprising code segments for operating the video surveillance system based on video primitives.

2. A computer-readable medium as in claim 1, wherein the code segments for operating the video surveillance system comprise:

code segments for extracting video primitives; and

code segments for extracting event occurrences from the video primitives.

3. A computer-readable medium as in claim 2, wherein the event occurrences are extracted using event discriminators.

4. A computer-readable medium as in claim 2, further comprising code segments for archiving the extracted video primitives.

5. A computer-readable medium as in claim 2, further comprising code segments for undertaking a response based on extracted event occurrences.

6. A computer-readable medium as in claim 5, wherein the response comprises initiating another sensor system.

7. A computer-readable medium as in claim 1, further comprising code segments for calibrating the video surveillance system.

8. A computer-readable medium as in claim 7, wherein the code segments for calibrating
5 comprise code segments for self-calibrating the video surveillance system.

9. A computer-readable medium as in claim 8, wherein the code segments for self-calibrating comprise:

code segments for detecting as least one object in a source video; and
10 code segments for tracking the object.

10. A computer-readable medium as in claim 9, wherein the code segments for detecting at least one object comprise:

code segments for detecting at least one object via motion of the object; and
15 code segments for detecting at least one object via change in a background model.

11. A computer-readable medium as in claim 7, wherein the code segments for self-calibrating comprise:

code segments for identifying trackable areas; and
20 code segments for identifying typical sizes of typical objects.

12. A computer-readable medium as in claim 7, wherein the code segments for calibrating comprise:

code segments for manual calibration;
code segments for semi-automatic calibration; and
code segments for automatic calibration.

5 13. A computer-readable medium as in claim 1, further comprising code segments for
tasking the video surveillance system with event discriminators.

10 14. A computer-readable medium as in claim 13, wherein the code segments for tasking
comprise code segments for identifying at least one object.

15 15. A computer-readable medium as in claim 13, wherein the code segments for tasking
comprise code segments for identifying at least one spatial area.

20 16. A computer-readable medium as in claim 13, wherein the code segments for tasking
comprise code segments for identifying at least one temporal attribute.

 17. A computer-readable medium as in claim 13, wherein the code segments for tasking
identify at least one interaction.

25 18. A computer-readable medium as in claim 13, wherein the code segments for tasking
identify at least one alarm.

19. A computer-readable medium as in claim 1, wherein the video primitives are from at least one of a video sensor and another sensor.

20. A computer-readable medium as in claim 1, wherein the video primitives are
5 retrieved from an archive of video primitives.

21. A computer system comprising the computer-readable medium of claim 1.

22. A computer-readable medium comprising software for a video surveillance system,
10 comprising:

code segments for accessing archived video primitives; and

code segments for extracting event occurrences from accessed archived video primitives.

23. A computer-readable medium as in claim 22, wherein the event occurrences are
15 extracted using event discriminators.

24. A computer-readable medium as in claim 22, further comprising code segments for undertaking a response based on extracted event occurrences.

20 25. A method comprising the step of operating a video surveillance system based on video primitives.

26. A method comprising the steps of:

accessing archived video primitives; and

extracting event occurrences from accessed video primitives.